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Mexico

Citrus

Annual

2001

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Report Highlights:
Mexican orange and grapefruit production for MY 2001/02 is forecast to be lower compared to MY 2000/01 production, due to weather related problems. Lime production is forecast to increase slightly for MY 2001/02. FCOJ production is also forecast to increase, due to expected higher prices. Therefore, FCOJ exports are forecast to increase for MY 2002.

Includes PSD changes: Yes
Includes Trade Matrix: No
Annual Report
Mexico [MX1], MX

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SECTION I. SITUATION AND OUTLOOK

Situation and Outloook

The recession in the United States is spilling over into Mexico and could have negative impacts on the consum purchasing power and trade in other sectors of the economy. According to the Mexican government, more tha 400,000 jobs have been lost during the first semester of 2001. The unemployment rate for September 2001 w percent compared to 1.9 percent in December 2000. The GDP growth for 2001 is estimated by private analys at 0.3 percent, a marked contrast to the 6.9 percent GDP growth in 2000. These same analysts estimate industı production to slow down mainly in the "maquila sector", due to a slower demand for exports to the U.S. Also, Mexican oil sector has been affected as revenue from oil exports have fallen as a result of low international pr corresponding revenue losses from various sectors of the economy have led to a general slowdown and promp Mexican government to announce that it is planning to cut 3 billion pesos (US$330 million) in spending -- the this year.

Citrus Situation

Citrus production in Mexico has gone through difficult times due to high costs of production, adverse weathe conditions, and lack of credit. Orange and grapefruit production is forecast to decrease for MY 2001/02 and l production is forecast to increase slightly. Exports are expected to keep growing for MY 2001/02 but some e fear that demand from the international market will not increase very much due to the slowdown in the U.S. ec FCOJ production and exports are forecast to grow because of better international prices. If the situation chan exports will fall again as in MY 2000/01.

SECTION II. STATISTICAL TABLES

FRESH ORANGE

PSD Table						
Country	**Mexico**					
Commodity	**Fresh Oranges**		**(HECTARES)(1000 TREES)(1000 MT)**			
	Revised 1999		Preliminary 2000		Forecast 2001	
	Old	New	Old	New	Old	New
Market Year Begin	**11/1999**		**11/2000**		**11/2001**	
Area Planted	332443	332443	332600	333000	0	333500
Area Harvested	294521	294521	306000	306000	0	300000
Bearing Trees	60671	60671	61812	61812	0	60600
Non-Bearing Trees	7586	7586	5373	5454	0	6767
TOTAL No. Of Trees	68257	68257	67185	67266	0	67367
Production	3385	3385	3500	3500	0	3100
Imports	32	32	22	22	0	22
TOTAL SUPPLY	3417	**3417**	3522	**3522**	0	**3122**
Exports	11	11	10	19	0	20
Fresh Dom. Consumption	2996	2996	3142	3173	0	2732
Processing	410	410	370	330	0	370
TOTAL DISTRIBUTION	3417	**3417**	3522	**3522**	0	**3122**

FRESH CITRUS OTHER

PSD Table						
Country	**Mexico**					
Commodity	**Fresh Citrus,Other**		**(HECTARES)(1000 TREES)(1000 MT)**			
	Revised 1999		Preliminary 2000		Forecast 2001	
	Old	New	Old	New	Old	New
Market Year Begin	**11/1999**		**11/2000**		**11/2001**	
Area Planted	122000	125302	123000	132000	0	136000
Area Harvested	110000	119872	111000	126000	0	127000
Bearing Trees	21340	23255	21534	24444	0	24765
Non-Bearing Trees	2328	1053	2328	1164	0	1755
TOTAL No. Of Trees	23668	24308	23862	25608	0	26520
Production	1220	1593	1230	1630	0	1650
Imports	1	1	1	1	0	1
TOTAL SUPPLY	1221	**1594**	1231	**1631**	0	**1651**
Exports	240	264	240	245	0	250
Fresh Dom. Consumption	737	1063	745	1118	0	1133
Processing	244	267	246	268	0	268
TOTAL DISTRIBUTION	1221	**1594**	1231	**1631**	0	**1651**

FRESH GRAPEFRUIT

PSD Table						
Country	**Mexico**					
Commodity	**Fresh Grapefruit**		**(HECTARES)(1000 TREES)(1000 MT)**			
	Revised 1999		Preliminary 2000		Forecast 2001	
	Old	New	Old	New	Old	New
Market Year Begin	**11/1999**		**11/2000**		**11/2001**	
Area Planted	12300	13000	12400	13200	0	13500
Area Harvested	9700	12800	9700	12800	0	12800
Bearing Trees	1823	2406	1823	2406	0	2406
Non-Bearing Trees	488	376	507	752	0	1316
TOTAL No. Of Trees	2311	2782	2330	3158	0	3722
Production	160	240	164	250	0	225
Imports	1	9	1	10	0	10
TOTAL SUPPLY	161	**249**	165	**260**	0	**235**
Exports	3	2	2	3	0	4
Fresh Dom. Consumption	134	215	138	223	0	197
Processing	24	32	25	34	0	34
TOTAL DISTRIBUTION	161	**249**	165	**260**	0	**235**

FRESH CONCENTRATE ORANGE JUICE

PSD Table						
Country	**Mexico**				**65Degrees Brix**	
Commodity	**Juice, Orange**				**(MT)**	
	Revised 1999		Preliminary 2000		Forecast 2001	
	Old	New	Old	New	Old	New
Market Year Begin	**01/2000**		**01/2001**		**01/2002**	
Deliv. To Processors	410	410	370	330	0	370
Beginning Stocks	3000	3000	3000	3000	3000	2500
Production	41000	41000	37000	33000	0	37000
Imports	1	1	1	1	0	1
TOTAL SUPPLY	44001	**44001**	40001	**36001**	3000	**39501**
Exports	37801	37801	33801	30501	0	33501
Domestic Consumption	3200	3200	3200	3000	0	3000
Ending Stocks	3000	3000	3000	2500	0	3000
TOTAL DISTRIBUTION	44001	**44001**	40001	**36001**	0	**39501**

ORANGE PRICES

WHOLESALE ORANGE PRICES (PESOS/KG)			
Month	**2000**	**2001**	**Change %**
January	**1.43**	**1.30**	**(9.09)**
February	**1.40**	**1.27**	**(9.29)**
March	**1.43**	**1.27**	**(11.19)**
April	**1.64**	**1.30**	**(20.73)**
May	**1.95**	**1.63**	**(16.41)**
June	**1.72**	**1.94**	**12.79**
July	**1.76**	**2.78**	**57.95**
August	**2.76**	**3.53**	**27.90**
September	**2.06**	**3.47**	**68.45**
October	**1.52**	**1.64**	**7.89**
November	**1.51**	**N/A**	**N/A**
December	**1.12**	**N/A**	**N/A**

SOURCE: SERVICIO NACIONAL DE INFORMACION DE MERCADOS
AVR. EXCHANGE RATE FOR 2000 US$1.00 = $ 9.40 PESOS
EXCHANGE RATE NOV. 8, 2001 US$1.00 = $ 9.20PESOS

PERSIAN LIME PRICES

PERSIAN LIME WHOLESALE PRICES (PESOS/KG)			
Month	**2000**	**2001**	**Change %**
January	**4.18**	**2.85**	**(31.82)**
February	**5.80**	**2.18**	**(62.41)**
March	**5.66**	**4.80**	**(15.19)**
April	**3.00**	**3.65**	**21.67**
May	**1.72**	**1.55**	**(9.88)**
June	**1.14**	**1.12**	**(1.75)**
July	**1.13**	**1.05**	**(7.08)**
August	**1.14**	**1.14**	**0.00**
September	**0.98**	**1.12**	**14.29**
October	**1.13**	**0.98**	**(13.27)**
November	**1.81**	**N/A**	**N/A**
December	**2.70**	**N/A**	**N/A**

SOURCE: SERVICIO NACIONAL DE INFORMACION DE MERCADOS
AVR. EXCHANGE RATE FOR 2000 US$1.00 = $ 9.40 PESOS
EXCHANGE RATE NOV. 8, 2001 US$1.00 = $ 9.20PESOS

KEY LIME PRICES

KEY LIME WHOLESALE PRICES (PESOS/KG)			
Month	**2000**	**2001**	**Change %**
January	**7.90**	**4.01**	**(49.24)**
February	**7.70**	**3.00**	**(61.04)**
March	**3.57**	**2.41**	**(32.49)**
April	**2.75**	**1.79**	**(34.91)**
May	**2.40**	**1.86**	**(22.50)**
June	**2.43**	**2.14**	**(11.93)**
July	**2.77**	**1.93**	**(30.32)**
August	**2.70**	**2.25**	**(16.17)**
September	**2.82**	**1.97**	**(30.14)**
October	**2.81**	**1.94**	**(30.96)**
November	**4.51**	**N/A**	**N/A**
December	**5.65**	**N/A**	**N/A**

SOURCE: SERVICIO NACIONAL DE INFORMACION DE MERCADOS
AVR. EXCHANGE RATE FOR 2000 US$1.00 = $ 9.40 PESOS
EXCHANGE RATE NOV. 8, 2001 US$1.00 = $ 9.20 PESOS

GRAPEFRUIT PRICES

GRAPEFRUIT WHOLESALE PRICES FOR 2000 MAIN PRODUCER STATES *(PESOS/KG)*			
MONTH	MICHOCÁN	TAMAULIPAS	VERACRUZ
JANUARY	3.60		2.32
FEBRUARY	3.54	2.20	2.40
MARCH	3.62	2.00	2.31
APRIL	4.03		
MAY	4.01		
JUNE	3.87	3.00	
JULY	4.14		
AUGUST	4.49		
SEPTEMBER	3.60		
OCTOBER	3.64	1.50	
NOVEMBER	3.13		
DECEMBER	2.27		

SOURCE: SNIM

AVERAGE EXCHANGE RATE FOR 2000 USD$1.00 = $9.40 PESOS

Note: shaded area represents that domestic grapefruit prices were not available.

GRAPEFRUIT WHOLESALE PRICES FOR 2001
MAIN PRODUCER STATES
(PESOS/KG)

MONTH	MICHOCÁN	TAMAULIPAS	VERACRUZ
JANUARY			1.90
FEBRUARY			2.05
MARCH			2.40
APRIL			2.90
MAY		3.90	3.10
JUNE	3.30	4.25	
JULY	3.43		
AUGUST	4.20		
SEPTEMBER	4.40		3.00
OCTOBER			2.16
NOVEMBER			2.33 *
DECEMBER			

*** As of November 8, 2001**

SOURCE: SNIM
EXCHANGE RATE (NOVEMEBER 8, 2001) US$1.00 = $ 9.21 PESOS
Note: shaded area represents that domestic grapefruit prices were not available.

EXCHANGE RATE

MONTHLY EXCHANGE RATE AVERAGES			
	1999	**2000**	**2001**
January	10.13	9.02	9.76
February	10.01	9.43	9.70
March	9.75	9.28	9.60
April	9.43	9.37	9.33
May	9.38	9.50	9.14
June	9.53	9.81	9.09
July	9.37	9.43	9.15
August	9.38	9.27	9.12
September	9.33	9.33	9.40
October	9.52	9.52	9.45
November	9.40	9.50	9.24 *
December	9.38	9.44	N/A
Annual Avg.	**9.55**	**9.40**	**N/A**

Source: Mexican Federal Register

Note: Monthly rates are averages of daily exchange rates from the Banco de Mexico.

* As of Novemeber 14, 2001

SECTION III. NARRATIVE ON SUPPLY & DEMAND, POLICY & MARKETING

FRESH ORANGES

PRODUCTION

The fresh orange production forecast for MY 2001/02 (November-October) is 3.1 MMT, a decrease compare MY 2000/01, due to the alternate bearing nature of the crop. Also, Veracruz had weather related problems that impact production negatively. The third and fourth blooms were affected by untimely rainfall and warm weath reduced flowering and fruit set for the last part of the season. However, orange trees had good first and secon blooms in Veracruz, due to timely rainfall; it is consequently expected that the Valencia harvest from Octobe will be good, albeit not as large as the MY 2000/01 crop. Production in San Luis Potosí was also affected by rainfall. Production will also be affected because some areas in Veracruz have been abandoned due to low ma prices and high input costs. Output from the Tamaulipas crop of Valencia oranges will also be lower, due to th season cycle; however, an early variety (Marsh) of oranges was slightly larger than expected. Orange trees in of Nuevo Leon will also be bearing less fruit, but, as in Tamaulipas, the first crop of early varieties (Marsh) ha increased compared to MY 2000/01. The MY 2001/02 forecast for oranges destined for processing is 370,0(a 12 percent increase compared to MY 2000/01, due to industry expectations for higher international frozen concentrate orange juice prices (FCOJ). The fresh orange production estimate for MY 2000/01 remains unch due to favorable weather conditions in most of the producing states. The estimate for oranges destined for pr for MY 2000/01 was revised downward based on industry information and lower international prices for FCO. Production data for MY 1999/01 remains unchanged.

Area planted for oranges is forecast at 333,500 hectares for MY 2001/02, a very slight increase over MY 200 area planted. According to growers, area planted has been increasing slowly, due to fluctuating prices. Althou planted for MY 2000/01 was revised upward based on official data, growers contrastingly indicate that orange were abandoned in Veracruz or were planted with limes as a result of the floods and heavy rain that occurred d October 1999. In fact, some expansions in Veracruz have been almost offset by growers abandoning groves d high production costs, or switching to other commodities. In Alamo, for example, some growers have increas plantings of orange trees, while other growers affected by the 1999 floods have abandoned groves. In Martine Torre, producers are switching to Persian Lime production. Meanwhile, the processing industry, which buys r the product in the market, has now begun to plant its own groves in order to ensure a continuous supply. The r expansion of orange groves in other areas of the country has also been slow. Veracruz, with approximatly 145 hectares, which accounts for approximately 45 percent of the country's total planted area, is about 90 percent irrigated, whereas Nuevo Leon, with 8 percent of the total area planted in Mexico, is about 85 percent irrigate water. The cost of production is higher in Nuevo Leon than in Veracruz because of irrigation costs. Growers indicate that lack of credit availability and the high cost of production, along with wide swings in fresh orange marketing problems, have limited the planting of new trees. Average tree density in Veracruz is 200 trees per

Nuevo Leon has about 25,000 hectares of oranges with almost no new plantings, because of limited water avai new irrigated area. Groves have been replanted with new early-maturing Valencia trees at higher densities, ran from 163 to 300 trees per hectare. The higher density is an effort to help prevent frost damage. Most of the c of this region are grown for the fresh market because of the good quality. Most of the plantings of orange tre 42,000 has.) in the states of Tabasco, Campeche and Yucatan are in *ejidos* (communal farms) and are relatively

compared to Veracruz. The quality, however, is still not very good and most of the crop goes mainly to the fre market. Data for MY 1999/00 orange production remains unchanged.

Country-wide orange yields in MY 2001/02 are forecast to decrease to 10.3 MT/Ha due to weather related pr and the off-season cycle. Yields, however, could decrease further depending on the volume of oranges of the fourth blooms in Veracruz. Orange yields differ widely depending on the production area. Usually, Veracruz range from 10 to 20 MT/Ha. In Nuevo Leon, yields range from 12 to 15 MT/Ha. In San Luis Potosi, yields ra from 7 to 13 MT/Ha. This variance in yields is caused by many factors such as weather, input levels, tree dens terrain.

Costs of production have increased for all citrus fruit, especially for imported inputs, such as fertilizers, pesti other agrochemical products which have correspondingly increased at the rate of inflation. Production costs among the citrus regions and between producers. The average cost of production in some areas in Veracruz fo traditional grove with little intensive cultivation is approximately 4,850 pesos/Ha (US$521/Ha) or less, while average cost for a more intensively-farmed grove is about 11,600 pesos/Ha (US$1,247.30/Ha). Fertilization control accounts for much of the difference between these two different averages. These costs represent appr 40 percent of total production costs. Average field worker wages are about 45 pesos (US$4.83) per day, but sometimes producers have to pay 60 pesos or more (US$6.45) per day to attract enough workers. To harvest oranges, workers are being paid much more -- about 200 pesos/MT (US$20.6/MT), due to competition for wo from the *maquiladoras* and immigration to the United States. The events of September 11th in the U.S., howeve could reverse this flow, and more workers could go back to work in the fields.

Grower prices at the farm gate for MY 2001/02 began in October at a low of 500 pesos/MT (US$53.76/MT) f early varieties, although prices are expected to increase to approximately 600 to 800 pesos/MT (US$64.51 to 86.02/MT) when the juice industry begins to buy fruit. Transportation costs from Veracruz to Mexico City ar 2,500 to 3,000 pesos per 10 MT (US$268.81 to $322.58 per 10 MT) for one-day delivery.

In 2001, the Mexican government announced the establishment of a campaign against citrus tristeza virus (CTV main objective of this campaign is to establish phytosanitary measures to prevent, control and erradicate CTV brown citrus aphid in Mexico (Report MX 1123). The brown citrus aphid has been detected in the states of Q Roo and Yucatan, and CTV has been detected in the state of Baja California. According to citrus producers, ci from the Yucatan has to be washed, and packed in order to be transported to other states. So far, this extra pro being paid by local producers at approximately 80 pesos/MT (US$8.60/MT). According to producers in Verac there are still no organized efforts from other states to help producers in the Yucatan to stop the spreading of Growers in other states have not yet organized to protect their groves and efforts are being done more on an in basis, with some producers planting CTV-resistant root stock.

CONSUMPTION

The fresh orange consumption forecast for MY 2001/02 is 2.7 MMT, a 14 percent decrease compared to MY 2000/01 consumption, due to expected higher prices and a decrease in the consumer purchasing power. Final consumption estimates, however, will depend both on the final volume purchased by the processing industry as the fruit production from the last two blooms in Veracruz. The MY 2000/01 consumption estimate was revise upward, due to a lower volume of oranges destined for the processing industry and lower market prices.

Orange prices for MY 2001/02 are expected to be higher because of shorter supplies. During the first two we October 2001, wholesale prices of new-crop Valencia oranges from Veracruz averaged 1.80 pesos/kg. (US$0 compared to 1.50 pesos/kg (US$0.16/kg) in October 2000. Most of the oranges in the fresh market are desti domestic fresh squeezed juice.

TRADE

Mexican orange exports for MY 2001/02 are forecast to increase to 20,000 MT if demand from the U.S. cont the same rate as in MY 2000/01. Orange exports for MY 2000/01 were revised upward because of a larger de from the U.S. Quality and prices for Mexican oranges were far better during MY 2000/01 than in MY 1999/0 exports were lower. Most of the oranges exported to the U.S. are from Sonora, which produces very good, hig quality oranges. Mexico will continue to export processed oranges as peeled slices for fruit salads and other f According to sources, the international market is demanding more peeled fruit. The United States continues t largest export market for Mexican oranges. Argentina, however, has increased imports from Mexico. Mexica exporters keep exploring Asian markets, such as Hong Kong and Japan. The high quality oranges produced in t Sonora desert (about 150,000 MT) are suitable for these markets because shipments come from the Sonora fr free zone.

Mexico could also have access to other citrus fruit markets because the certification of the forced hot air pro which has been approved by APHIS for tangerines, oranges, and grapefruit in Nuevo Laredo. Exporters who de to switch from methyl bromide treatment to the forced hot air process will be able to export to the United Sta as other countries which use this new technology in quarantine treatments. However, producers have indicate treatment is not widely used, as it is very expensive.

Mexican orange imports for MY 2001/02 are expected to remain unchanged, due to available domestic orange affordable prices. MY 1999/01 and 2000/01 data remain unchanged. U.S. orange exports to Mexico could ex significantly given the import zero tariff in Mexico and the ability of California, Texas and Arizona to ship to U.S. orange prices, however, are higher than Mexican domestic produce.

MARKETING

There are three major wholesale markets or *Centrales de Abastos* in the country which handle 80 percent of tot citrus fruit sold. Mexico City's Central Market handles 40 percent of the sales. The two other largest markets located in Guadalajara and Monterrey. Mexico's distribution system is unique in its mix between traditional d methods (central market purchasing and delivery) and more sophisticated methods (large regional and national distributors).

Distributors/importers are the key to the success of any imported product since only some of the major retail the major food service chains import directly. For any U.S. company entering Mexico, it is important to have or reliable distributor, who can maintain regular contact with buyers, interface with the government and handle required paperwork, and ensure that service is maintained.

For fresh horticultural products, including citrus fruits, each city has a central wholesale market known as the *de Abastos*. Virtually all of Mexico's horticultural and fruit production and imports move through these marke they are sold in boxes. Typical buyers in this area are large supermarket chains, street markets, hotels and rest

U.S. citrus fruit exporters should be aware of the fact that the Mexican market is more price sensitive than qua sensitive. This is one of the main reasons for limited exports of US citrus products. Despite the excellent qu are 4 to 5 times higher than Mexican products. Some attempts have been made by US firms to enter the marke they have had limited success because of strategies emphasizing quality rather than price. Another limitation citrus exports to Mexico are the phytosanitary restrictions. Only citrus fruits coming from the states of Calif and Arizona are authorized by the Mexican government to enter the country having an International Phytosanit Certificate, which indicates that the products were grown in fruit fly-free areas. Negotiations are still underw Florida Citrus.

OTHER TRADE AGREEMENTS

A free trade agreement was signed between Mexico and the European Union (EU) that went into effect on July 2000. This agreement is expected to strengthen Mexico's strategic position in the world trade arena. Among agricultural products negotiated in the agreement is fresh orange juice and FCOJ. The EU allows 1,000 MT o orange juice under a quota access to the EU market. The tariff will be 50 percent under the MFN or GPS duti applicable at the time of import as of July 1, 2000. However, Mexico has not yet realized the full benefit of t market access. Also, the EU will allow 30,000 MT of FCOJ under a quota with a tariff of 25 percent under the or GPS duties applicable at the time of import. The FCOJ must have a concentration of 20 degrees brix with a above 1.089 grams per cubic centimeter. Mexico has increased exports of FCOJ to Germany, the United King and the Netherlands.

Also, Mexico signed on March 6, 2000, a free trade agreement with Israel. Among the agricultural products negotiated in the agreement with Israel are unlimited exports of Mexican fresh oranges and FCOJ. Since Isra imports these products from other sources, it is uncertain what share of the market Mexico will be able to cap

FRESH CITRUS, OTHER

PRODUCTION

This section covers two citrus fruits that are of economic significance to Mexico: Key Limes and Persian Lim Mexican Key Limes are grown mainly on the Pacific coast, in the states of Colima, Michoacan, Guerrero and Most Persian Limes are grown in a micro-climate called "*La Huasteca*" that includes portions of the states of V San Luis Potosi, Tamaulipas, and Hidalgo. Also, Oaxaca, Yucatan, and Tabasco in the southern part of Mexico producing Persian Limes.

Total production of both limes for MY 2001/02 is forecast at 1,650,000 MT, slightly higher than MY 2000/0 production due to more acreage coming into production. According to producers, rainfall during May/June 2 Michoacan and Colima for Key limes was satisfactory. Overall weather conditions in Veracruz for Persian lim also satisfactory. Production for MY 1999/00 and 2000/01 were revised upward based on recent official esti

Good weather conditions and the growth of area planted for both limes have increased production. The floods heavy rain problems that occurred in Veracruz during October 1999 did not affect lime production as it did fo and grapefruit.

Area planted to both Persian and Key Limes has increased at a low rate. Due to the export benefits of Persian planted area for this fruit has grown at a faster rate in Veracruz. Although some Veracruz producers have repla orange and grapefruit groves with Persian Limes because of favorable international prices, the acreage of thes still small. Nevertheless, new trees are coming into production in Veracruz, Michoacan and Oaxaca. Approxi 25 percent of the total area is planted with Persian Limes and 75 percent is planted with Key Limes. Due to th excellent winter window for Key Limes for the domestic market, planted area for this fruit is expanding in Mi According to producers, however, the domestic market is saturated and therefore a sharp increase in the area p would only result in lower producer profits. Total area planted for MY 2001/02 is forecast at 136,000 hectar planted and harvested for MY 1999/00 and 2000/01 was revised upward based on new official estimates. Nea percent of the Persian Lime groves in Veracruz use micro-jet irrigation or other irrigation systems and produc round. Most of the irrigated Key Lime groves are in the states of Michoacan and Colima and are able to produ year round. In contrast, almost all the planted area for Key Lime in Guerrero and Oaxaca is non-irrigated. In in over half of the Key Lime groves, coconut palm trees are planted in between Key Lime trees. The purpose interplanting is to increase producer revenue.

Since production costs for Persian Limes in Veracruz produced for export is higher than those for oranges, th Lime trade tends to be dominated by large producers. According to sources, Persian Lime production costs av from 8,000 pesos/Ha to 9,500 pesos/Ha (US$860.20 to $1,021.50/Ha) or more, due to higher prices for imp inputs such as fertilizers, pesticides and other agrochemical products. Well tended areas can have production $14,000 pesos/Ha (US$1,505.37/Ha). Growers indicate that smaller producers, who do not meet internationa standards, will eventually return to orange production. Transportation costs from Veracruz to Mexico City ar 3,500 to 4,000 pesos/truck (US$376.34 to $430.10 / truck), and delivery time averages about 8 hours.

The cost of production for Key Limes varies according to the cultural practices and technology used. In the m important Key Lime producing states (Oaxaca, Colima and Michoacan) production costs can vary from 7,000 pesos/Ha to 16,000 pesos/Ha (US$752.68 to $1,720.43/Ha) for the well-tended areas.

Persian and Key Lime yields differ widely depending on production conditions. The yields for Persian Limes Veracruz mostly range from 5 to 12 MT/Ha., depending on cultural practices, but some yields are as high as 1 MT/Ha. Key Lime yields average between 7 to 12 MT/Ha., with a few well-tended groves reaching 30 MT/Ha Key Limes in Colima that are interplanted with coconut palm, yields are generally 50 percent less than in conv groves.

Grower prices for Persian Limes range from 400 to 800 pesos/MT (US$43.00 to $86.00/MT) for the domest market, and 600 to 3,000 pesos/MT (US$64.50 to $322.58/MT) for the export market during January to April Growers, however, indicate that prices during 2000 and 2001 have been low. Grower prices for MY 2000/01 domestic market were on average 300 pesos/MT (US$32.25/MT), while export prices were on average $1,55 pesos/MT (161.30/MT) for MY 2000/01. Prices for MY 2001/02 are expected to be higher.

Grower prices for Key Limes fluctuate more than do those for Persian Limes, depending on the season and th producing state. On average, Key Lime grower prices from Michoacan range from 650 to 2,600 pesos /MT (U to $279/MT). Michoacan production is geared toward the winter season (October/February), while productio Colima, Oaxaca and other states cover the rest of the year. There is, however, year-round production for both and Persian Limes.

CONSUMPTION

Domestic consumption of both Key and Persian Limes in Mexico depends largely on price. Total lime consu MY 2001/02 is forecast at 1,133,000 MT. Consumption for MY 1999/00 and 2000/01 was revised upward ba on official data. Demand for both types of limes has been increasing because of good market prices. Those P Limes which do not meet the higher quality requirements demanded of the export market, will be consumed domestically.

Most of the Key Limes go to the fresh domestic market, although exports have been increasing recently. In g approximately 18 to 23 percent of total Key Lime production goes to processing. Producers from Colima an Michoacan indicate that approximately 35 to 40 percent of their limes go to processors. Official information processing industry, however, is unavailable. About 60 to 70 percent of Persian Limes from Veracruz go to th market and the rest go to the fresh market and processing plants. This balance, however, depends on US dema

Mexican Key Limes and Persian Limes compete for the same market. When Key Limes and Persian Limes a present in the domestic market, prices are relatively low. At the onset of the Persian Lime harvest season (Au September), prices for both drop. After a month or two, however, when Persian Lime growers begin to export for Persian Limes increase and remain high until April or May when exports of Persian Limes stop and both c again competing for the fresh domestic market. Key Limes were sold during November 2001, at 2.50 pesos/k (US$0.27/kg) on the wholesale market, while Persian Limes were sold at 1.00 peso/kg (US$0.10/kg). Retail for Key Limes at the large supermarkets in November 2001 were 3.50 pesos/Kg (US$0.37/kg) while Persian were selling at 2.90 pesos/Kg (US$0.31/kg). Key Limes from Michoacan, Colima and Oaxaca are sold on the wholesale market in18-20/kg boxes; those from Guerrero are sold in 20-22/kg bags. Persian Limes are sold i wholesale market in 50-100/kg bags.

TRADE

Persian and Key Lime exports for MY 2001/02 are forecast at 250,000 MT, a slight increase from the preced due to slightly higher prices compared to MY 2000/01. The current international price for Persian Limes, hov remains low. MY 2001/02 prices for Persian Limes in November 2001 were US$8 and US$9/40-pound box. 2000/01 prices for Persian Limes in November 2000 were US$7 and US$8/box. Persian Limes reach on aver US$20 to $30/ 40-pound box when international prices are good. Exporters have indicated that export sales a because of lower demand from the United States, but they expect demand will increase again during CY 2002. Exporters indicate that Brazil is competing with Mexico for the European market. Export estimates for MY 2 were revised upward based on trade data. However, exports for 2000/01 were lower than those of MY 1999/0(to low international prices. Export data for MY 1999/00 was revised upward reflecting better international pr According to producers, Persian Limes from Mexico supply about 40 percent of the U.S. and Canadian marke However, lime producers are expanding into new markets in Japan and Europe. Lime imports for MY 2001/0

forecast at 1,000 MT. Lime imports are not expected to increase dramatically, due to ample domestic supplie for MY 1999/00 and 2000/01 remain unchanged.

Mexico's tariff rate on imported limes from the United States is zero under NAFTA. The U.S. tariff rate for P Limes is zero. The U.S. tariff phase-out for Key Limes is not expected to substantially increase lime exports t United States in the short term. Mexican exports depend on U.S. demand and price.

NAFTA TARIFF SCHEDULE - US TARIFF		
YEAR	KEY LIMES	PERSIAN LIMES
2000	0.60¢/kg	0.00¢/kg
2001	0.40¢/kg	0.00¢/kg
2002	0.27¢/kg	0.00¢/kg

FRESH GRAPEFRUIT

PRODUCTION

Grapefruit production for MY 2001/02 is forecast at 225,000 MT, a 10 percent decrease compared to MY 2(estimates. This lower production is a result of a lack of rain during the production cycle in certain areas of Ve and the use of fewer inputs to maintain groves in that state due to high costs of production. Although most of grapefruit from Nuevo Leon is irrigated, some dry weather is expected to affect yields in that area. Grapefruit Michoacan had very good weather conditions for MY 2001/02 and good yields. Although the groves are still r new, they are entering the sixth or seventh year of production and so are reaching their maximum-bearing pote Consequently, production is expected to reach 25,000 MT or more per year.

Grapefruit production estimates for MY 2000/01 were revised upward based on official data. This higher proc was a result of overall better weather conditions with adequate rainfall compared to the dry weather that preva MY 1999/00. Data for MY 1999/01 production reflect final official information. The reason for higher pro data is that SAGARPA information includes a revision for higher production and yields for the newer producti of Michoacan and Campeche.

Grapefruit planted area had remained almost constant up to 1997. Area planted in Veracruz and Nuevo Leon, v are two main important producer states, has increased very little because of the high cost of production and lo domestic demand. New planted areas in central Veracruz have been off-set by abandoned areas in other parts c same state. Most of the new planted areas are geared towards the European export market. According to the industry, however, grapefruit plantings increased in the state of Michoacan because of better general weather c and a much lower cost of production. These areas are also geared towards the export market. Campeche is als new developed area with few hectares compared to other states that are geared also to the export markets.

Planted area for grapefruit is forecast at 13,500 hectares for MY 2001/02 a small increase compared to MY 2
hectares. Most of the increase in area planted is in Michoacan and Campeche. According to growers, Michoa
planting because of good domestic and international prices, but when all area is in production it could create
oversupplies as the domestic market is still small. Area planted and harvested estimates for MY 1999/01 and
were revised upward based on official data. This data reflect increases in area planted, mainly in Michoacan ar
Campeche.

There are two types of grapefruit planted in Mexico: the red table varieties produced in Tabasco, Campeche,
Michoacan, Nuevo Leon and Veracruz for export to the United States and Europe as fresh fruit; and the white
varieties produced in Tamaulipas and Veracruz for juice production or for peeled slices. According to grower
planting of red varieties are increasing because of the export market preferences. The state of Nuevo Leon ha
certified forced-hot-air chamber in Montemorelos, but due to its high costs to operate, it has been used very l
alternative quarantine treatment. So, exports through this method are not expected to grow.

According to growers, the MY 2001/02 forecast for grapefruit destined for processing will be approximately
MT. Grapefruit is used for peeled slices or juice production. The increase in grapefruit for processing reflec
MY 1999/00 has been a result of a larger demand from the export markets. Therefore, as it is easier to impor
grapefruit from the U.S., imports for the peeled slices industry has grown. Most of the fruit is imported from
then exported as peeled fruit to the U.S. or European markets. Consequently, estimates for processing for MY
1999/00 and 2000/01 were revised upward.

Overall average yields for MY 2001/02 are forecast at 17.5 MT/Ha, lower than MY 2000/01 yields because o
of rainfall and lower usage of inputs. Average yields for MY 2000/01 are estimated at 19.5 MT/Ha because c
good weather conditions. An overall normal yield for grapefruit is approximately 23 MT/Ha. Veracruz accou
about 60 percent of Mexican grapefruit production and has the highest yield in the country with 20 to 26 MT/H
Nuevo Leon follows with yields of 18 to 20 MT/Ha. Michoacan has lower yields -- between 10 to 14 MT/Ha.,
these yields are expected to increase. In other states, yields vary from 10 to 15 MT/Ha. Grower prices for M
2000/01 in Veracruz began in August 2001 at approximately 1,700 pesos/MT (US$183.00/MT) for the red va
however, prices tend to drop by November. Grower prices for Nuevo Leon began on average at 1,000 pesos/M
(US$107.00/MT). Since Michoacan has developed areas with red varieties that can be harvested in June/July,
prices were higher at approximately 2,000 to 3,000 pesos/MT (US$215.05 to $322.58/MT).

CONSUMPTION

Grapefruit consumption for MY 2001/02 is forecast to decreast to 197,000 MT, due to expected higher price
decrease in the consumer purchasing power. According to growers, however, demand for grapefruit has incre
the past years due to the preference of consumers for low calorie foods. Wholesale prices for October 2001
Mexico City were approximately 2.00 pesos/kg (US$0.21/kg), which were lower than in October 2000. Reta
averaged 3.50 pesos/kg (US$0.37/kg). Growers indicate that there is no premium on quality, as consumers ar
interested in lower prices. This trend also affects grapefruit consumption versus other more accessible fruits
oranges. Since Michoacan can harvest earlier than Veracruz, producers can command higher prices in the don
market. Estimated consumption for MY 1999/00 and 2000/01 were revised upward due larger supplies at aff
prices.

TRADE

Grapefruit exports for MY 2001/02 are forecast to reach 4,000 MT. According to growers, demand from the European market has been growing steadily. Export prices for August/September 2001 were better compared months in 2000. Export prices for those months were approximately US$8.00/40 lb. box, while in 2000, pric US$5.50 /18 lb. box. Although grapefruit exports are geared to the European and Japanese markets, exports a small. In fact, Michoacan had good domestic prices for June and July, which could extend until October and w leave lower volumes for export. Therefore, when Veracruz production began late in August domestic prices w already low. Export estimates for MY 2000/01 were revised upward and estimates for MY 1999/00 were revi downward based on official Mexican data. According to sources, most of the imported grapefruit from the U further processed for re-export to U.S. and European markets. Imports have been growing for the past three y and are expected to reach 10,000 MT for MY 2001/02. Data for imported grapefruit for MY 1999/00 and 20 was revised upward, due to an increase in demand from the European markets. The tariff rate for imported gra follows.

NAFTA GRAPEFRUIT TARIFF SCHEDULE - MEXICAN TARIFF				
SEASON	**2000**	**2001**	**2002**	**2003**
August 1 to September 30	0.00¢/kg	0.00¢/kg	0.00¢/kg	0.00¢/kg
October 1 to December 31	0.87¢/kg	0.58¢/kg	0.39¢/kg	0.26¢/kg
January 1 to July 31	0.87¢/kg	0.58¢/kg	0.39¢/kg	0.26¢/kg

NAFTA GRAPEFRUIT TARIFF SCHEDULE - U.S. TARIFF		
SEASON	**2000**	**2001**
August 1 to September 30	0.00¢/kg	0.00¢/kg
October 1 to October 31	0.50¢/kg	0.30¢/kg
November 1 to July 31	0.80¢/kg	0.50¢/kg

With the preferential tariffs under NAFTA and the new forced hot air treatment, export opportunities for Mexi grapefruit in the U.S. might improve. However, any substantial increase in grapefruit exports, will depend upo advances in the phytosanitary area and technological practices. While likely to expand slightly, U.S. grapefruit to Mexico will still be relatively small.

FROZEN CONCENTRATE ORANGE JUICE

PRODUCTION

Frozen concentrate orange juice (FCOJ) production for MY 2002 (January-December) is forecast at 37,000 M 12 percent increase compared to MY 2001 production because of expected higher international prices. Juice production depends heavily on the international price of FCOJ. The industry is expecting prices to rise at leas US$0.90/lb for CY 2002. The international price for FCOJ contracts for CY 2001 deliveries were at US$0.7(US$0.75/lb., a low price which represents a smaller margin for the industry to buy fruit. FCOJ production est for MY 2001 were revised downward to 33,000 MT, a decrease of almost 10 percent from previous estimates lower international prices and higher international stocks. The industry had a slow start for MY 2001, due to t international price conditions. Despite the fact that there were larger supplies of oranges available for the indu attractive prices, the industry reduced the expected processing volume of oranges. Data for MY 2000 FCOJ production remains unchanged. The industry is expecting to buy fresh fruit at approximately 500 pesos/MT (US$53.76/MT) for MY 2002, compared to February/March 2001 prices of approximately 350 to 450 pesos/ (US$36.88 to $47.41/MT) because of larger supplies of oranges at lower prices. Fresh market prices for orai processing may go as high as 600 to 700 pesos/MT (US$64.50 - $75.26/MT) by the end of the season.

The general uncertainty of the FCOJ industry has not changed from previous years. Unless FCOJ export price good, enabling processors to increase the price paid to fruit producers, it is unlikely that juice concentrate pro will increase dramatically. Due to financial problems of the processing industry, there has been a concentrati ownership.

CONSUMPTION

In general, the industry does not expect domestic consumption to increase dramatically because of the availab fresh oranges in the domestic market. The majority of Mexican consumers prefer and demand fresh squeezed instead of processed orange juice. The industry indicates that consumption for MY 2002 is expected to remai constant, because of a decrease in consumption from the hotel and restaurant industry offset by a steady avail fresh, domestic oranges. The same applies for the downward revision to MY 2001 FCOJ consumption figures consumption estimate for MY 2000 remains unchanged. Most of the orange juice produced in Mexico goes t export market. According to processors, there is usually about a 3,000 MT carryover of FCOJ from one year other. This carryover decreased in MY 2000, due to lower FCOJ production.

TRADE

Exports of FCOJ for MY 2002 are forecast to increase to approximately 33,500 MT. Exports are expected to higher because of expected higher demand and international prices. Exports for MY 2000 were revised downw due to lower international prices and higher international stocks. Furthermore, the strength of the peso agains in 2000 and 2001 has not helped the export industry. According to industry sources, Mexico will try to fill 1(of the 2001 U.S. quota; however, as of October 2001, 60 percent of the quota had only been filled. The Unite is the main market for Mexican FCOJ, with Japan and European countries also becoming important markets fo product. Any FCOJ export growth will be limited to the needs of Florida's industry to mix their juice with a h

sugar-ratio and more colored Mexican juice. Also, export increases will depend on promotion in other marke besides the U.S. FCOJ imports are almost negligible compared to domestic production. Having enough dom supply for FCOJ, and having almost flat consumption, greater imports are not likely for the time being.

Under NAFTA, Mexico has access to the U. S. market for 40 million gallons of FCOJ (single strength equival one-half of the Most Favored Nation (MFN) tariff rate. Any FCOJ imports above the quota will enter the Unit States at the MFN rate. This quota will be phased-out over 15 years. Exporters of FCOJ need a certificate iss the Mexican government to be able to export to the U.S. under the NAFTA provisions. The Mexican governme allocates the quota among most of the producing companies to give them an equal opportunity to share the be NAFTA. When a company cannot cover the designated quota, the Mexican government reallocates the uncove share to other companies.